October 14, 2014

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re:

NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the July to September 2014 period.

### Phosphorus Removal

The Wastewater Treatment Plant Operators continued to struggle with operation of the filters. The filters frequently were unable to handle the flow and bypass operations were necessary at times.

AECOM visited the plant to review the punch-list status and to inspect the filter operations to determine possible causes for the continuing filter operation issues.

WesTech visited the site in September to repair filter controls.

AECOM prepared a protocol for peak-flow testing of the filters. Due to WesTech's schedule and its presence being necessary to fully evaluate filter operations, the peak-flow testing is scheduled for the end of October 2014. AECOM, Penta, WesTech, NHDES and Town representatives are expected to be onsite for that performance test.

The Town will keep NHDES and EPA apprised of the situation and any events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Larry A. Wiggins, P.E.

**Public Works Director** 

Town of Newport, NH

LAW/jas

cc: Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

an W-1/

B. Hilliard (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

A. Fulton, Esq. (Gardner, Fulton & Waugh, P.L.L.C. - 78 Bank Street, Lebanon, NH 03766-1727)

FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7013 2630 0000 7431 6320 NHDES - CERTIFIED MAIL: 7014-0510-0001-7050-8119

July 14, 2014

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1
5 Post Office Sq., Suite 100
Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the April to June 2014 period.

1. During this quarter, Penta Corp. worked on the Punchlist items defined in the Punchlist walk-through in late March. AECOM requested further detailed information from Penta Corp. regarding some of the Punchlist items and subsequently Penta Corp. requested an additional Punchlist walk-through to discuss certain items on a verbal basis. After conflicting schedules delayed the walk-through for approximately two weeks, the walk-through was scheduled for July 8, 2014.

In April and May, the WWTP operators struggled with the filters clogging and with cassette failures. In late May, the cassette failure problem required bypassing the filters until new cassettes were received in mid-June.

On May 30, 2014, representatives of AECOM, the Town of Newport and the NH Department of Environmental Services met in Concord, NH to discuss the plant's operational status, violations status and possible resolutions.

After receipt of the final Punchlist, Penta Corp. is to schedule the filter manufacturer to perform a thorough inspection of the filters and associated equipment to certify their operation and performance. A final performance test will begin after the filters are determined to be in accordance with project specifications. The performance test date has not yet been determined.

2. With regards to Whole Effluent Toxicity:

Since the Phosphorus Removal Project is experiencing operational problems, the EPA required WET compliance monitoring (as stated in the Administrative Order) will be delayed until the plant is operational.

3. The infiltration and inflow study is ongoing. The Public Works Department is continuing the sewer system evaluation by constructing additional sewer manholes, performing infiltration and inflow testing and sewer video.

The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Land A. Wiggins, P.E. Public Works Director Town of Newport, NH

#### LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

T. Carney, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

A. Fulton, Esq. (Gardner, Fulton & Waugh, P.L.L.C. - 78 Bank Street, Lebanon, NH 03766-1727)

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EPA - CERTIFIED MAIL: 7013 2630 0000 7431 6221 NHDES - CERTIFIED MAIL: 7013 2630 0000 7431 6238

5/12/14 9:30 am. mts w/NHDES (conf. call)
Paul, Tracy, Ken, Tim + Joy Newport SNC P Danother issue algae bloom u/lagoons roller coaster" 2009 AO New P" open AU -to get quarterly rpts and resolution in near future continued ) new to is needed Pault. - conjety w/Ao good contractor Jessyn 135ve filters were blinded darifier ahead of filters reeded 3) get help from EPA Fen + Tim & sport the most the in the last year to work to get system to work Alm + polymon Jelling sys

hand to get that to work late summer/early fall 2013 filters a normal P + algae min Swectanical prob w/sys Coth filters
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breaking out table in Alters

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Summer blended flow ? thigh flow

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got remedy clarifier or something

NHDES to approach Tonn - work if Town won't so to table resoliate on SAEC w/ WHOPS Tracy will keep ongth in Il

July 14, 2014

#### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the April to June 2014 period.

1. During this quarter, Penta Corp. worked on the Punchlist items defined in the Punchlist walk-through in late March. AECOM requested further detailed information from Penta Corp. regarding some of the Punchlist items and subsequently Penta Corp. requested an additional Punchlist walk-through to discuss certain items on a verbal basis. After conflicting schedules delayed the walk-through for approximately two weeks, the walk-through was scheduled for July 8, 2014.

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Since the Phosphorus Removal Project is experiencing operational problems, the EPA required WET compliance monitoring (as stated in the Administrative Order) will be delayed until the plant is operational.

 The infiltration and inflow study is ongoing. The Public Works Department is continuing the sewer system evaluation by constructing additional sewer manholes, performing infiltration and inflow testing and sewer video.

The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Land A. Wiggins, P.E. Public Works Director Town of Newport, NH

#### LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

T. Carney, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

A. Fulton, Esq. (Gardner, Fulton & Waugh, P.L.L.C. - 78 Bank Street, Lebanon, NH 03766-1727)

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EPA - CERTIFIED MAIL: 7013 2630 0000 7431 6221 NHDES - CERTIFIED MAIL: 7013 2630 0000 7431 6238

April 14, 2014

#### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1
5 Post Office Sq., Suite 100
Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the January to March 2014 period.

 In early January Penta Corp submitted a request for partial Substantial Completion (Substantial Completion on the entire plant except the associated equipment).

Due to sludge build up in the filters, several filter cassettes were damaged. The onsite surplus cassettes were discovered to be the incorrect size, and Penta Corp. agreed to order replacement cassettes. They were delivered to the plant in the end of January.

After installing the replacement cassettes and performing a thorough cleaning, the Town attempted to determine the chemicals and dosages for `filter operation during cold weather. The Town notified AECOM and the NHDES of the Town's intentions and both parties attended on a regular basis. AECOM sent a chemical expert to assist with the trials. Both Alum and PACL were tested as coagulants. The polymer was changed in dosage only. As a result of the testing during the 3 month period, it appears PACL is better suited for cold temperatures. At the end of March the filters were operational and the effluent Total P (after the filters) was regularly below the limit of 0.42 mg/l.

AECOM, Penta Corp., NHDES and the Town performed a Punchlist walkthrough of the project in late March. Penta Corp. is to start on the Punchlist work upon receipt of a final Punchlist from AECOM.

After receipt of the final Punchlist, Penta Corp. is to schedule the filter manufacturer to perform a thorough inspection of the filters and associated equipment to certify their operation and performance. A final performance test will begin after the filters are determined to be in accordance with project specifications. The performance test date has not yet been determined.

2. With regards to Whole Effluent Toxicity:

Since the Phosphorus Removal Project is experiencing operational problems, the EPA required WET compliance monitoring (as stated in the Administrative Order) will be delayed until the plant is operational.

The infiltration and inflow study is ongoing. The Public Works Department is continuing the sewer system evaluation by constructing additional sewer manholes, performing infiltration and inflow testing and sewer video.

The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Larry A. Wiggins, P.E. Public Works Director Town of Newport, NH

LAW/jas

cc: Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

T. Carney, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

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FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7013 2630 0000 7431 6085 NHDES - CERTIFIED MAIL: 7013 2630 0000 7431 6092 January 20, 2014

#### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the October to December 2013 period.

1. In October 2013, Penta Corporation initiated a 25 day performance test as required by contract specifications. For approximately 22 days the plant was delivering effluent generally meeting permit limits until the plant experienced a problem with the polymer system. This resulted in the filters going into constant backwash which is inconsistent with contract specifications. Penta Corporation then power washed the filters in an effort to continue the 25 day test. After power washing, several filter cassettes were found to be damaged and a sufficient number of replacement cassettes were not available to replace all those damaged, so the test was terminated.

Penta Corporation submitted a request for Substantial Completion on the entire project with exception of the filters.

In light of the results of the performance test and Penta Corporation's request, the Town met with the NHDES and convened a telephone conference with

October 28, 2013

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the July to September 2013 period.

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While WesTech Corporation was onsite, the Town, Penta Corporation representatives of the NHDES tested the filters and some operal adjustments were made during testing. The filters then performed approximately two weeks and then went into continuous backwash. Wes Corporation scheduled an onsite visit for October 29, 2013 to repair mechanical issues discovered in August. The Town met with the NHDES and AECOM (the Town's consultant) on October 7, 2013 to discuss the future protocol and possible solutions to the filter issues.

### 2. With regards to Whole Effluent Toxicity:

Since the Phosphorus Removal Project is experiencing operational problems, the EPA required WET compliance monitoring (as stated in the Administrative Order) will be delayed until the plant is operational.

The infiltration and inflow study is ongoing. The Public Works Department will continue the sewer system evaluation by constructing additional sewer manholes, continuing with the infiltration and inflow testing and evaluation of the sewer system with sewer video.

The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Larry A. Wiggins, P.E.

Public Works Director Town of Newport, NH

LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

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A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

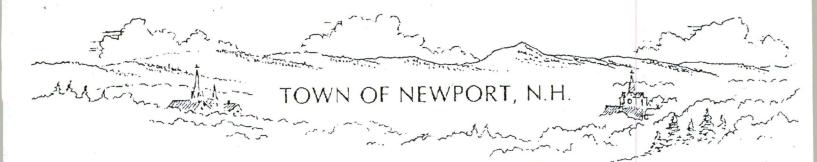
T. Carney, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

A. Fulton, Esq. (Gardner, Fulton & Waugh, P.L.L.C. - 78 Bank Street, Lebanon, NH 03766-1727)

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FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7012 2210 0002 0519 2725 NHDES - CERTIFIED MAIL: 7012 2210 0002 0519 2732



### FAX TRANSMISSION

October 28,2013 DATE:

FAX TO:

Susan Studlien, Director 617-918-0700 ATTN:

FAX NO .:

FROM:

Larry Wiggins
NEWPORT Public Works DEPARTMENT

603-863-8015 FAX NO .:

FAX TRANSMISSION REGARDING:

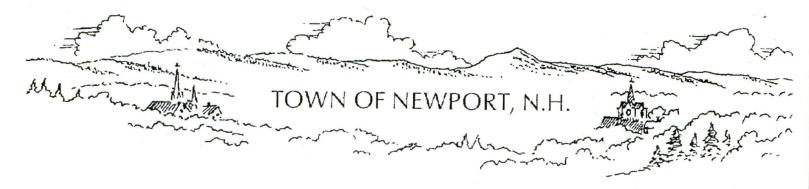
NPDES Remit No. NH100200

ministrative Order Dorket No. 09-015

PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 603-863 3650 IF YOU DO NOT RECEIVE ALL PAGES OR HAVE ANY QUESTIONS REGARDING THIS DOCUMENT.

TOTAL PAGES INCLUDING THIS COVER PAGE

C:YOFFICEYWPWINWYPDOCSVFORMSVFAXTRANS,FRM



October 28, 2013

#### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200
Administrative Order Docket No. 09-015
Town of Newport Wastewater Treatment Plant Upgrade
Quarterly Report

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Ms. Susan Studlien, Director
USEPA Office of Environmental Stewardship
WWTP Phosphorus Removal Upgrade (AO 09-015)

October 28, 2013 Quarterly Report Page 2 of 2

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Respectfully,

Larry A. Wiggins, P.E. Public Works Director

Town of Newport, NH

LAW/jas

cc: Tracy

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

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FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7012 2210 0002 0519 2725 NHDES - CERTIFIED MAIL: 7012 2210 0002 0519 2732

# Permit Limits with DMR Data

# NEWPORT WASTEWATER TREATMENT FACILITY 001A

Aluminum, total recoverable Limit Start Date = 7/1/07 Monitoring Location = 1

Req. Mon. mg/L NODI Code = 9 NODI Code = 9 DAILY MX 9 mg/L Req. Mon. mg/L NODI Code = 9 NODI Code = 9 MO AVG 9 mg/L 10/31/2011 11/12/11 09/30/2011 10/14/11 11/30/2011 12/14/11 01/31/2011 2/11/11 03/31/2011 4/15/11 04/30/2011 5/13/11 05/31/2011 6/10/11 06/30/2011 7/11/11 07/31/2011 8/12/11 08/31/2011 9/15/11 12/31/2011 1/13/11 01/31/2012 2/10/12 Rec Dt 02/28/2011 3/11/11 02/29/2012 3/13/12 03/31/2012 4/6/12 Season = 0 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104 01104

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(pend) WESTECH, IN DISC FILTERS OPERATIONAL ISSUES - NONSE DISCUSS PREJ. STATUS AND START-UP TOWN (AECOM (PROJ. ENG.) & PENTY CORP. (PROJ. CONTRACTOR) MET TO ACTIONE SUBSTANTIAN I/F STUDY-ONBOING (51/042) TIT (W0224) 122/13Schuduled to be 100,000gods 514 to 2013

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			Req. Mon. mg/L	Req. Mon. mg/L	
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX	
01104	05/31/201	05/31/2012 6/14/12	NODI Code = 9	NODI Code = 9	
01104	06/30/201	06/30/2012 7/11/12	NODI Code = 9	NODI Code = 9	
01104	07/31/2012 8/9/12	2 8/9/12	NODI Code = 9	NODI Code = 9	
01104	08/31/201	08/31/2012 9/15/12	NODI Code = 9	NODI Code = 9	
01104	09/30/201	09/30/2012 5/21/13	NODI Code = 9	NODI Code = 9	
01104	10/31/201	10/31/2012 11/13/12	NODI Code = 9	NODI Code = 9	
01104	11/30/201	11/30/2012 12/11/12	NODI Code = 9	NODI Code = 9	
01104		12/31/2012 1/15/13	9.3 mg/L	9.3 mg/L	
01104		01/31/2013 2/14/13	1.1 mg/L	1.4 mg/L	
01104		02/28/2013 3/14/13	3.3 mg/L	4.6 mg/L	
01104		03/31/2013 4/11/13	0.3 mg/L	0.41 mg/L	
01104		04/30/2013 5/15/13	0.12 mg/L	0.21 mg/L	
01104	-	05/31/2013 6/13/13	0.1 mg/L	0.32 mg/L	
01104		06/30/2013 7/15/13	0.2 mg/L	0.5 mg/L	
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			325 lb/d	542 lb/d	30 mg/L	45 mg/L	50 mg/L
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX	MO AVG	WKLY AVG	DAILY
00310	01/31/201	11 2/11/11	48 lb/d	P/ql 99	12 mg/L	14 mg/L	14 mg/L
00310	02/28/201	11 3/11/11	46 lb/d	48 lb/d	12 mg/L	12 mg/L	12 mg/L
00310	03/31/201	11 4/15/11	115 lb/d	192 lb/d	16 mg/L	23 mg/L	23 mg/L
00310	04/30/201	11 5/13/11	63 lb/d	92 lb/d	8 mg/L	10 mg/L	10 mg/L
00310	05/31/20	11 6/10/11	48 lb/d	p/ql 69	7 mg/L	12 mg/L	12 mg/L
00310	06/30/20	11 7/11/11	31 lb/d	48 lb/d	5 mg/L	6 mg/L	6 mg/L
00310	07/31/20	07/31/2011 8/12/11	14 lb/d	17 lb/d	3 mg/L	NODI Code =	4 mg/L

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		325 lb/d	542 lb/d	30 mg/L	45 mg/L	50 mg/L
Pram	MP Dt Rec Dt	MO AVG	DAILY MX	MO AVG	WKLY AVG	DAILY MX
00310	07/31/2011 9/15/11	NODI Code =	NODI Code =	NODI Code =	6 mg/L	NODI Code =
00310	08/31/2011 9/15/11	15 lb/d 51	21 lb/d	4 mg/L	5 mg/L	5 mg/L
00310	09/30/2011 10/14/11	31 lb/d	p/ql 09	4 mg/L	6 mg/L	6 mg/L
00310	10/31/2011 11/12/11	17 lb/d	22 lb/d	3 mg/L	3 mg/L	3 mg/L
00310	11/30/2011 12/14/11	20 lb/d	37 lb/d	4 mg/L	6 mg/L	6 mg/L
00310	12/31/2011 1/13/12	51 lb/d	63 lb/d	7 mg/L	8 mg/L	8 mg/L
00310	01/31/2012 2/10/12	47 lb/d	52 lb/d	10 mg/L	11 mg/L	11 mg/L
00310	02/29/2012 3/13/12	46 lb/d	58 lb/d	10 mg/L	12 mg/L	12 mg/L
00310	03/31/2012 4/6/12	23 lb/d	p/ql 29	11 mg/L	12 mg/L	12 mg/L
00310	04/30/2012 5/12/12	20 lb/d	62 lb/d	12 mg/L	13 mg/L	13 mg/L
00310	05/31/2012 6/14/12	32 lb/d	54 lb/d	5 mg/L	9 mg/L	9 mg/L
00310	06/30/2012 7/11/12	11 lb/d	15 lb/d	2 mg/L	3 mg/L	3 mg/L
00310	07/31/2012 8/9/12	34 lb/d	43 lb/d	9 mg/L	10 mg/L	10 mg/L
00310	08/31/2012 9/15/12	20 lb/d	26 lb/d	2 mg/L	6 mg/L	6 mg/L
00310	09/30/2012 5/21/13	15 lb/d	20 lb/d	4 mg/L	5 mg/L	5 mg/L
00310	10/31/2012 11/13/12	p/ql 6	13 lb/d	2 mg/L	3 mg/L	3 mg/L
00310	11/30/2012 12/11/12	23 lb/d	29 lb/d	4 mg/L	6 mg/L	6 mg/L
00310	12/31/2012 1/15/13	40 lb/d	52 lb/d	9 mg/L	10 mg/L	10 mg/L
00310	01/31/2013 2/14/13	40 lb/d	75 lb/d	7 mg/L	13 mg/L	13 mg/L
00310	02/28/2013 3/14/13	44 lb/d	45 lb/d	9 mg/L	10 mg/L	10 mg/L
00310	03/31/2013 4/11/13	110 lb/d	170 lb/d	18 mg/L	24 mg/L	24 mg/L
00310	04/30/2013 5/15/13	107 lb/d	150 lb/d	16 mg/L	22 mg/L	22 mg/L
00310	05/31/2013 6/13/13	81 lb/d	105 lb/d	14 mg/L	13 mg/L	21 mg/L
00310	06/30/2013 7/15/13	p/ql 9/	83 lb/d	9 mg/L	NODI Code =	10 mg/L
00310	06/30/2013 7/25/13	NODI Code =	NODI Code =	NODI Code =	21 mg/L	NODI Code =

E. coli, thermotol, MF, MTEC Limit Start Date = 7/1/07

		5	C3	
		126 #/100mL	406 #/100mL	
Pram	MP Dt Rec Dt	MO GEO	DAILY MX	
31633	01/31/2011 2/11/11	49 #/100mL	142 #/100mL	
31633	02/28/2011 3/11/11	30 #/100mL	188 #/100mL	
31633	03/31/2011 4/15/11	20 #/100mL	177 #/100mL	
31633	04/30/2011 5/13/11	3 #/100mL	7 #/100mL	
31633	05/31/2011 6/10/11	3 #/100mL	8 #/100mL	
31633	06/30/2011 7/11/11	2 #/100mL	7 #/100mL	
31633	07/31/2011 8/12/11	2 #/100mL	2 #/100mL	
31633	08/31/2011 9/15/11	3 #/100mL	24 #/100mL	
31633	09/30/2011 10/14/11	3 #/100mL	5 #/100mL	
31633	10/31/2011 11/12/11	2 #/100mL	2.5 #/100mL	
31633	11/30/2011 12/14/11	2 #/100mL	2 #/100mL	
31633	12/31/2011 1/13/11	14 #/100mL	86 #/100mL	
31633	01/31/2012 2/10/12	23 #/100mL	140 #/100mL	
31633	02/29/2012 3/13/12	6 #/100mL	16 #/100mL	
31633	03/31/2012 4/6/12	12 #/100mL	44 #/100mL	
31633	04/30/2012 5/12/12	4 #/100mL	40 #/100mL	
31633	05/31/2012 6/14/12	3 #/100mL	6 #/100mL	
31633	06/30/2012 7/11/12	2 #/100mL	2 #/100mL	
31633	07/31/2012 8/9/12	2 #/100mL	2 #/100mL	
31633	08/31/2012 9/15/12	2 #/100mL	2 #/100mL	
31633	09/30/2012 5/21/13	2 #/100mL	2 #/100mL	
31633	10/31/2012 11/13/12	2 #/100mL	2 #/100mL	
31633	11/30/2012 12/11/12	2 #/100mL	2 #/100mL	
31633	12/31/2012 1/15/13	18 #/100mL	163 #/100mL	
31633	01/31/2013 2/14/13	3 #/100mL	22 #/100mL	
31633	02/28/2013 3/14/13	10 #/100mL	93 #/100mL	
31633	03/31/2013 4/11/13	266 #/100mL	266 #/100mL	
31633	04/30/2013 5/15/13	5 #/100mL	20 #/100mL	
31633	05/31/2013 6/13/13	12 #/100mL	154 #/100mL	
31633	06/30/2013 7/15/13	7 #/100mL	30 #/100mL	

## Flow, in conduit or thru treatment plant Limit Start Date = 7/1/07

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		5	02
		Req. Mon. MGD	Reg. Mon. MGD
Pram	MP Dt Rec Dt	MO AVG	DAILY MX
50050	01/31/2011 2/11/11	0.47 MGD	0.58 MGD
50050	02/28/2011 3/11/11	0.47 MGD	0.53 MGD
50050	03/31/2011 4/15/11	0.94 MGD	1.6 MGD
50050	04/30/2011 5/13/11	0.97 MGD	1.2 MGD
50050	05/31/2011 6/10/11	0.78 MGD	0.95 MGD
50050	06/30/2011 7/11/11	0.63 MGD	0.95 MGD
50050	07/31/2011 8/12/11	0.52 MGD	NODI Code =
50050	07/31/2011 9/15/11	NODI Code =	0.68 MGD
20050	08/31/2011 9/15/11	0.61 MGD	1.4 MGD
50050	09/30/2011 10/14/11	0.74 MGD	1.2 MGD
50050	10/31/2011 11/12/11	0.76 MGD	1 MGD
50050	11/30/2011 12/14/11	0.64 MGD	0.9 MGD
50050	12/31/2011 1/13/11	0.77 MGD	0.96 MGD
50050	01/31/2012 2/10/12	0.59 MGD	0.8 MGD
50050	02/29/2012 3/13/12	0.54 MGD	0.65 MGD
50050	03/31/2012 4/6/12	0.62 MGD	0.82 MGD
50050	04/30/2012 5/12/12	0.54 MGD	0.72 MGD
50050	05/31/2012 6/14/12	0.71 MGD	0.95 MGD
50050	06/30/2012 7/11/12	0.6 MGD	0.84 MGD
50050	07/31/2012 8/9/12	0.45 MGD	0.54 MGD
50050	08/31/2012 9/15/12	0.51 MGD	0.7 MGD
50050	09/30/2012 5/21/13	0.49 MGD	0.72 MGD
50050	10/31/2012 11/13/12	0.57 MGD	1.3 MGD
50050	11/30/2012 12/11/12	0.62 MGD	1 MGD
50050	12/31/2012 1/15/13	0.59 MGD	1.1 MGD
50050	01/31/2013 2/14/13	0.58 MGD	1 MGD

			5	075
			Req. Mon. MGD	Req. Mon. MGD
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX
50050	02/28/20/	2/28/2013 3/14/13	0.61 MGD	0.94 MGD
50050	03/31/201	3/31/2013 4/11/13	0.72 MGD	1.1 MGD
50050	04/30/20	04/30/2013 5/15/13	0.81 MGD	1.1 MGD
50050	05/31/20	05/31/2013 6/13/13	0.73 MGD	1.1 MGD
50050	06/30/20	06/30/2013 7/15/13	0.87 MGD	1.2 MGD

### Nitrogen, ammonia total [as N] Limit Start Date = 7/1/07

Season = 0	0 = 0				
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			Red. Mon. mg/L	Red. Mon. mg/L	\
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX	>
00610	01/31/2011 2/11/11	2/11/11	17 mg/L	18 mg/L	
00610	02/28/2011 3/11/11	3/11/11	21 mg/L	23 mg/L	
00610	03/31/2011 4/15/11	4/15/11	16 mg/L	23 mg/L	
00610	04/30/2011 5/13/11	5/13/11	11 mg/L	11 mg/L	
00610	05/31/2011 6/10/11	6/10/11	11 mg/L	11 mg/L	
00610	06/30/2011 7/11/11	11/1/1	17 mg/L	19 mg/L	
00610	07/31/2011 8/12/11	8/12/11	21 mg/L	21 mg/L	
00610	08/31/2011 9/15/11	9/15/11	18 mg/L	20 mg/L	
00610	09/30/2011 10/14/11	10/14/11	0.25 mg/L	0.3 mg/L	
00610	10/31/2011 11/12/11	11/12/11	0.1 mg/L	0.11 mg/L	
00610	11/30/2011 12/14/11	12/14/11	4 mg/L	4.9 mg/L	
00610	12/31/2011 1/13/11	1/13/11	10 mg/L	10 mg/L	
00610	01/31/2012 2/10/12	2/10/12	13 mg/L	13 mg/L	
00610	02/29/2012 3/13/12	3/13/12	16 mg/L	19 mg/L	
00610	03/31/2012 4/6/12	4/6/12	18 mg/L	18 mg/L	
00610	04/30/2012 5/12/12	5/12/12	16 mg/L	16 mg/L	

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			Red. Mon. mg/L	Req. Mon. mg/L	
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX	
00610	٥	5/31/2012 6/14/12	19 mg/L	20 mg/L	
00610	_	06/30/2012 7/11/12	24 mg/L	25 mg/L	
00610	07/31/2012 8/9/12	2 8/9/12	20 mg/L	21 mg/L	
00610	_	08/31/2012 9/15/12	1 mg/L	3.3 mg/L	
00610		09/30/2012 5/21/13	0.33 mg/L	0.4 mg/L	
00010		10/31/2012 11/13/12	1 mg/L	2.2 mg/L	
00610		11/30/2012 12/11/12	12 mg/L	14 mg/L	
00610	_	12/31/2012 1/15/13	17 mg/L	18 mg/L	
00610		01/31/2013 2/14/13	18.5 mg/L	19 mg/L	
00610		02/28/2013 3/14/13	18.2 mg/L	20 mg/L	
00610		03/31/2013 4/11/13	19 mg/L	19 mg/L	
00610	٥	14/30/2013 5/15/13	13.5 mg/L	15 mg/L	
00610	_	05/31/2013 6/13/13	12.5 mg/L	14 mg/L	1
00610		06/30/2013 7/15/13	12 mg/L	13 mg/L	

pH Limit Start Date = 7/1/07

Season = 0	0=0			ŧ
			5	င္မ
			6.5 SU	8 SU
Pram	MP Dt	Rec Dt	MINIMOM	MAXIMUM
00400	01/31/201	01/31/2011 2/11/11	0.9 SU	7.6 SU
00400	02/28/201	02/28/2011 3/11/11	6.9 SU	7.6 SU
00400	03/31/201	03/31/2011 4/15/11	6.7 SU	7.4 SU
00400	04/30/201	04/30/2011 5/13/11	6.8 SU	7.6 SU
00400	05/31/201	05/31/2011 6/10/11	6.9 SU	7.7 SU
00400	06/30/201	06/30/2011 7/11/11	7 SU	7.6 SU
00400	07/31/201	07/31/2011 8/12/11	7.1 SU	7.6 SU

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		6.5 SU	8 SU	
Pram	MP Dt Rec Dt	MINIMOM	MAXIMUM	
00400	08/31/2011 9/15/11	6.9 SU	7.5 SU	
00400	09/30/2011 10/14/11	6.1 SU	7.3 SU	
00400	10/31/2011 11/12/11	6.6 SU	7.3 SU	
00400	11/30/2011 12/14/11	6.8 SU	7.5 SU	
00400	12/31/2011 1/13/12	0.9 SU	7.6 SU	
00400	01/31/2012 2/10/12	6.8 SU	7.6 SU	
00400	02/29/2012 3/13/12	1 SU	7.6 SU	
00400	03/31/2012 4/6/12	7.1 SU	7.8 SU	
00400	04/30/2012 5/12/12	7.2 SU	7.8 SU	
00400	05/31/2012 6/14/12	1 SU	7.5 SU	
00400	06/30/2012 7/11/12	7.1 SU	7.8 SU	
00400	07/31/2012 8/9/12	6.2 SU	7.9 SU	
00400	08/31/2012 9/15/12	6.3 SU	7.4 SU	1
00400	09/30/2012 5/21/13	0.9 SU	7.7 SU	1
00400	10/31/2012 11/13/12	0.9 SU	7.6 SU	
00400	11/30/2012 12/11/12	1 SU	7.7 SU	
00400	12/31/2012 1/15/13	0.9 SU	7.6 SU	
00400	01/31/2013 2/14/13	0.7 SU	7.6 SU	
00400	02/28/2013 3/14/13	0.9 SU	8 SU	
00400	03/31/2013 4/11/13	7 SU	7.7 SU	
00400	04/30/2013 5/15/13	6.8 SU	7.9 SU	
00400	05/31/2013 6/13/13	0.9 SU	7.5 SU	
00400	06/30/2013 7/15/13	7 SU	7.6 SU	

## Phosphate, ortho, dissolved [as P] Limit Start Date = 7/1/07

Season = 0

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Req. Mon. mg/L	9	J/L	ا/ر	)/L	)/F	J/L	//-	//-	/L	7	<b>V</b>	ıg/L	ıg/L	/L
Red.	MO AVG	1.7 mg/L	1.7 mg/L	1.3 mg/L	1.3 mg/L	1.5 mg/L	1.5 mg/L	1.5 mg/L	1.7 mg/L	1.2 mg/L	1.2 mg/L	0.01 mg/L	0.01 mg/L	1.1 mg/L
	MP Dt Rec Dt	01/31/2011 2/11/11	02/28/2011 3/11/11	03/31/2011 4/15/11	11/30/2011 12/14/11	12/31/2011 1/13/11	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13	03/31/2013 4/11/13
	Pram	00671	00671	00671	00671	00671	00671	00671	00671	00671	00671	00671	00671	00671

### Phosphorus, total [as P] Limit Start Date = 7/1/07

Season = 0

C1

42 mg/L

90665 04/30/2013 5/15/13 NODI Code = 2

00665 06/30/2013 7/15/13 NODI Code = 2

00665 06/30/2013 7/15/13 NODI Code = 2

Season = 1

1 mg/L MP Dt Rec Dt MO AVG

Pram

SOPERATIONS SHUTDOWN

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C1 1 mg/L

MO AVG 0.77 mg/L Pram MP Dt Rec Dt 00665 01/31/2013 2/14/13 00665 02/28/2013 3/14/13 00665 03/31/2013 4/11/13

1.1 mg/L NODI CODE = 2 <- OPER STTONS SHUTDOWN

## Limit Start Date = 3/6/09

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		3.7 mg/L	Req. Mon. mg/L
Pram	MP Dt Rec Dt	MO AVG	DAILY MX
00665	04/30/2011 5/13/11	1.3 mg/L	1.4 mg/L
9900	05/31/2011 6/10/11	1.4 mg/L	1.9 mg/L
9900	06/30/2011 7/11/11	2.5 mg/L	2.8 mg/L
9900	07/31/2011 8/12/11	2.4 mg/L	2.4 mg/L
00665	08/31/2011 9/15/11	2.3 mg/L	2.4 mg/L
00665	09/30/2011 10/14/11	1.6 mg/L	1.7 mg/L
00665	10/31/2011 11/12/11	1.4 mg/L	1.6 mg/L
9900	04/30/2012 5/12/12	2.5 mg/L	2.7 mg/L
00665	05/31/2012 6/14/12	2.9 mg/L	3.1 mg/L
00665	06/30/2012 7/11/12	2.8 mg/L	3.2 mg/L
00665	07/31/2012 8/9/12	2.5 mg/L	NODI Code =
00665	07/31/2012	NODI Code =	NODI Code =
00665	08/31/2012 9/15/12	1.9 mg/L	NODI Code =
9900	08/31/2012	NODI Code =	NODI Code =
9900	09/30/2012 5/21/13	1 mg/L	1.1 mg/L
9000	10/31/2012 11/13/12	1.4 mg/L	NODI Code =
00665	10/31/2012 5/21/13	NODI Code =	1.6 mg/L

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			3.1 mg/L	Req. Mon. mg/L
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX
9900	01/31/2011 2/11/11	1 2/11/11	2.7 mg/L	2.9 mg/L
9900	02/28/201	02/28/2011 3/11/11	2.8 mg/L	2.9 mg/L
9900	03/31/2011 4/15/11	1 4/15/11	2.2 mg/L	2.8 mg/L
9900	11/30/201	11/30/2011 12/14/11	1.7 mg/L	2.1 mg/L
9900	12/31/201	12/31/2011 1/13/11	2 mg/L	2.1 mg/L
00665	01/31/2012 2/10/12		2 mg/L	2 mg/L
9900	02/29/201	02/29/2012 3/13/12	2.1 mg/L	2.3 mg/L
00665	03/31/2012 4/6/12		2.4 mg/L	2.5 mg/L
9900	11/30/201	11/30/2012 12/11/12	1.6 mg/L	NODI Code =
9900	11/30/2012 5/21/13	2 5/21/13	NODI Code =	1.9 mg/L
00665	12/31/2012 1/15/13	2 1/15/13	2.2 mg/L	2.3 mg/L

# Solids, total suspended Limit Start Date = 7/1/07

Season = 0	0 = 0				>		
			9	02	5	C2	C3
			325 lb/d	542 lb/d	30 mg/L	45 mg/L	50 mg/L
Pram	MP Dt	Rec Dt	MO AVG	DAILY MX	MO AVG	WKLY AVG	DAILY MX
00530	01/31/201	1 2/11/11	49 lb/d	55 lb/d	12 mg/L	14 mg/L	14 mg/L
00230	02/28/201	1 3/11/11	47 lb/d	P/ql 99	12 mg/L	14 mg/L	14 mg/L
00530	03/31/201	1 4/15/11	78 lb/d	127 lb/d	11 mg/L	16 mg/L	16 mg/L
00230	04/30/201	1 5/13/11	p/ql 66	128 lb/d	12 mg/L	14 mg/L	14 mg/L
00530	05/31/201	1 6/10/11	18 lb/d	117 lb/d	12 mg/L	18 mg/L	18 mg/L
00230	06/30/201	17/11/11	32 lb/d	P/ql 95	5 mg/L	11 mg/L	11 mg/L
00530	07/31/201	1 8/12/11	p/ql 09	73 lb/d	12 mg/L	14 mg/L	14 mg/L
00530	08/31/2011 9/15/11	1 9/15/11	62 lb/d	83 lb/d	15 mg/L	20 mg/L	20 mg/L
00230	09/30/201	1 10/14/11	115 lb/d	160 lb/d	17 mg/L	22 mg/L	22 mg/L
00530	10/31/201	0/31/2011 11/12/11	25 lb/d	108 lb/d	8 mg/L	15 mg/L	15 mg/L

		8	Q2	2	C5	c3
		325 lb/d	542 lb/d	30 mg/L	45 mg/L	50 mg/L
Pram	MP Dt Rec Dt	MO AVG	DAILY MX	MO AVG	WKLY AVG	DAILY MX
00530	11/30/2011 12/14/11	14 lb/d	21 lb/d	3 mg/L	4 mg/L	4 mg/L
00530	12/31/2011 1/13/12	p/ql 92	85 lb/d	11 mg/L	15 mg/L	15 mg/L
00530	01/31/2012 2/10/12	P/ql 65	p/qI	12 mg/L	13 mg/L	13 mg/L
00530	02/29/2012 3/13/12		83 lb/d	16 mg/L	16 mg/L	16 mg/L
00530	03/31/2012 4/6/12		128 lb/d	18 mg/L	26 mg/L	26 mg/L
00530	04/30/2012 5/12/12		135 lb/d	26 mg/L	30 mg/L	30 mg/L
00530	05/31/2012 6/14/12		119 lb/d	9 mg/L	22 mg/L	22 mg/L
00230	06/30/2012 7/11/12		44 lb/d	4 mg/L	9 mg/L	9 mg/L
00530	07/31/2012 8/9/12		143 lb/d	21 mg/L	33 mg/L	33 mg/L
00530	08/31/2012 9/15/12		149 lb/d	25 mg/L	33 mg/L	33 mg/L
00530	09/30/2012 5/21/13	P/qI 29	98 lb/d	16 mg/L	21 mg/L	21 mg/L
00530	10/31/2012 11/13/12		30 lb/d	5 mg/L	7 mg/L	7 mg/L
00530	11/30/2012 12/11/12		33 lb/d	5 mg/L	6 mg/L	6 mg/L
00530	12/31/2012 1/15/13		102 lb/d	13 mg/L	20 mg/L	20 mg/L
00530	01/31/2013 2/14/13	125 lb/d	384 lb/d	20 mg/L	NODI Code =	46 mg/L
00530	01/31/2013 2/27/13	NODI Code =	NODI Code =	NODI Code =	21 mg/L	NODI Code =
00530	02/28/2013 3/14/13	188 lb/d	216 lb/d	37 mg/L	48 mg/L	48 mg/L
00530	03/31/2013 4/11/13	175 lb/d	237 lb/d	30 mg/L	40 mg/L	40 mg/L
00530	04/30/2013 5/15/13	155 lb/d	205 lb/d	22 mg/L	30 mg/L	30 mg/L
00530	0	162 lb/d	388 lb/d	26 mg/L	48 mg/L	48 mg/L
00530	06/30/2013 7/15/13	124 lb/d	150 lb/d	14 mg/L	NODI Code =	15 mg/L
00230	06/30/2013 7/25/13	NODI Code =	NODI Code =	NODI Code =	24 mg/L	NODI Code =

Monitoring Location = G
BOD, 5-day, 20 deg. C
Limit Start Date = 7/1/07

Reg. Mon. mg/L MO AVG

232 mg/L 230 mg/L

MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11

00310 00310 00310

00310 00310

170 mg/L 121 mg/L

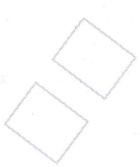
03/31/2011 4/15/11 04/30/2011 5/13/11 05/31/2011 6/10/11

149 mg/L 223 mg/L

		,																							
1/6 III 64 I	223 mg/L	231 mg/L	272 mg/L	198 mg/L	186 mg/L	217 mg/L	184 mg/L	202 mg/L	197 mg/L	206 mg/L	186 mg/L	198 mg/L	222 mg/L	243 mg/L	233 mg/L	296 mg/L	285 mg/L	216 mg/L	178 mg/L	218 mg/L	247 mg/L	180 mg/L	170 mg/L	174 mg/L	148 mg/L
00/01/2011 0/10/11	06/30/2011 7/11/11	07/31/2011 8/12/11	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/12	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13	03/31/2013 4/11/13	04/30/2013 5/15/13	05/31/2013 6/13/13	06/30/2013 7/15/13
	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310

# Limit Start Date = 7/1/07

	5	Red. Mon. mg/L	MO AVG	255 mg/L	299 mg/L	218 mg/L	185 mg/L	206 mg/L	365 mg/L	353 mg/L	401 mg/L	275 mg/L	293 mg/L	284 mg/L	255 mg/L	305 mg/L	260 mg/L	335 mg/L	320 mg/L	316 mg/L	319 mg/L	356 mg/L	419 mg/L	481 mg/L	479 mg/L	297 mg/L	248 mg/L	335 mg/L	330 mg/L	262 mg/L	
•			MP Dt Rec Dt	01/31/2011 2/11/11	02/28/2011 3/11/11	03/31/2011 4/15/11	04/30/2011 5/13/11	05/31/2011 6/10/11	06/30/2011 7/11/11	07/31/2011 8/12/11	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/12	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/19/13	03/31/2013 4/11/13	
			Pram	00230	00230	00530	00530	00530	00230	00530	00230	00230	00230	00230	00530	00230	00230	00230	00530	00530	00230	00530	00530	00230	00530	00530	00530	00230	00230	00230	



5

			Red. Mon. mg/L
Pram	MP Dt	Rec Dt	MO AVG
00530	04/30/201	3 5/15/13	233 mg/L
00530	05/31/201	05/31/2013 6/13/13	302 mg/L
00530	06/30/201	3 7/15/13	223 mg/L

# Monitoring Location = K BOD. 5-day. percent removal Limit Start Date = 7/1/07

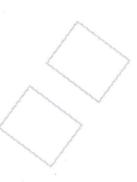
	5	85 %	MO AV MN	% 96	% 56	91 %	94 %	% 96	% 86	% 66	% 66	% 86	% 66	% 86	% 96	% 56	% 56	% 56	94 %	
•			MP Dt Rec Dt	01/31/2011 2/11/11	02/28/2011 3/11/11	03/31/2011 4/15/11	04/30/2011 5/13/11	05/31/2011 6/10/11	06/30/2011 7/11/11	07/31/2011 8/12/11	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/11	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	
			Pram	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	



C1 85 %	MO AV MN	% 26	% 66	% 26	% 86	% 66	% 66	% 86	. % 56	% 26	% 96	% 06	91 %	95 %	94 %
	MP Dt Rec Dt	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13	03/31/2013 4/11/13	04/30/2013 5/15/13	05/31/2013 6/13/13	06/30/2013 7/15/13
	Pram	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010	81010

# Solids, suspended percent removal Limit Start Date = 7/1/07

MO AV MN	% 56	% 96	% 56	93 %	94 %	% 66	% 26
Rec Dt	11 2/11/11	113/11/11	1114/15/11	11 5/13/11	111 6/10/11	111 7/11/11	07/31/2011 8/12/11
MP Dt	01/31/20	02/28/20	03/31/20	04/30/20	05/31/20	06/30/20	07/34/20
Pram	81011	81011	81011	81011	81011	81011	81011
	MP Dt Rec Dt	MP Dt Rec Dt 01/31/2011 2/11/11	MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11	MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11 03/31/2011 4/15/11	MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11 03/31/2011 4/15/11 04/30/2011 5/13/11	MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11 03/31/2011 4/15/11 04/30/2011 5/13/11 05/31/2011 6/10/11	MP Dt Rec Dt 01/31/2011 2/11/11 02/28/2011 3/11/11 03/31/2011 4/15/11 04/30/2011 5/13/11 05/31/2011 6/10/11

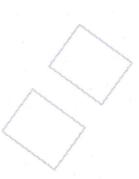


C1	MO AV MN	% 96	94 %	% 26	% 66	% 96	% 96	94 %	% 56	92 %	% 26	% 66	94 %	94 %	% 26	% 66	% 86	% 96	94 %	% 68	% 68	% 06	91 %	94 %
	MP Dt Rec Dt	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/11	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13	03/31/2013 4/11/13	04/30/2013 5/15/13	05/31/2013 6/13/13	06/30/2013 7/15/13
	Pram	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011	81011

### Monitoring Location = O BOD, 5-day, 20 deg, C Limit Start Date = 7/1/07

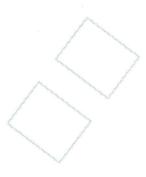
0 - ----

2	5	488 lb/d	WKLY AVG	25 lb/d	48 lb/d	192 lb/d	92 lb/d	p/ql 69	48 lb/d	32 lb/d	21 lb/d	p/ql 09	22 lb/d	37 lb/d	63 lb/d	52 lb/d	58 lb/d	P/ql 29	62 lb/d	54 lb/d	16 lb/d	43 lb/d	26 lb/d	20 lb/d	13 lb/d	29 lb/d	52 lb/d	63 lb/d	15 lb/d	170 lb/d	150 lb/d	105 lb/d	83 lp/q
0			MP Dt Rec Dt	01/31/2011 2/11/11	02/28/2011 3/11/11	03/31/2011 4/15/11	04/30/2011 5/13/11	05/31/2011 6/10/11	06/30/2011 7/11/11	07/31/2011 8/12/11	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/12	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13	03/31/2013 4/11/13	04/30/2013 5/15/13	05/31/2013 6/13/13	06/30/2013 7/15/13
Season			Pram	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310



### Solids, total suspended Limit Start Date = 7/1/07

7	5	488 lb/d	WKLY AVG	55 lb/d	26 lb/d	127 lb/d	128 lb/d	117 lb/d	26 lb/d	73 lb/d	83 lb/d	160 lb/d	110 lb/d	21 lb/d	95 lb/d	P/qI 29	58 lb/d	128 lb/d	135 lb/d	119 lb/d	44 lb/d	143 lb/d	149 lb/d	p/qI 98	30 lb/d	33 lb/d	102 lb/d	102 lb/d	384 lb/d
			MP Dt Rec Dt	01/31/2011 2/11/11	02/28/2011 3/11/11	03/31/2011 4/15/11	04/30/2011 5/13/11	05/31/2011 6/10/11	06/30/2011 7/11/11	07/31/2011 8/12/11	08/31/2011 9/15/11	09/30/2011 10/14/11	10/31/2011 11/12/11	11/30/2011 12/14/11	12/31/2011 1/13/12	01/31/2012 2/10/12	02/29/2012 3/13/12	03/31/2012 4/6/12	04/30/2012 5/12/12	05/31/2012 6/14/12	06/30/2012 7/11/12	07/31/2012 8/9/12	08/31/2012 9/15/12	09/30/2012 5/21/13	10/31/2012 11/13/12	11/30/2012 12/11/12	12/31/2012 1/15/13	01/31/2013 2/14/13	02/28/2013 3/14/13
			Pram	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00530	00230	00530



WKLY AVG Q1 488 lb/d 237 lb/d 205 lb/d 388 lb/d 150 lb/d Rec Dt 06/30/2013 7/15/13 03/31/2013 4/11/13 04/30/2013 5/15/13 05/31/2013 6/13/13 Pram 00530 00530 00530 00530

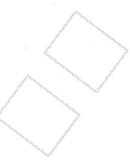
## Monitoring Location = 1

### Aluminum, total recoverable Limit Start Date = 7/1/07

### Season = 0

			5
			Rea. Mon. ma/L
Pram	MP Dt	Rec Dt	DAILY MX
01104	03/31/2011 4/15/11	4/15/11	0.11 mg/L
01104	06/30/2011 7/11/11	7/11/11	0.08 mg/L
01104	09/30/2011 10/14/11	10/14/11	0.22 mg/L
01104	12/31/2011 1/13/11	1/13/11	0.08 mg/L
01104	03/31/2012 4/6/12	4/6/12	0.09 mg/L
01104	06/30/2012 4/10/13	4/10/13	0.05 mg/L
01104	09/30/2012 4/10/13	4/10/13	0.17 mg/L
01104	12/31/2012 1/15/13	1/15/13	0.15 mg/L
01104	03/31/2013 4/11/13	4/11/13	3.2 mg/L
01104	06/30/2013 7/15/13	7/15/13	0.06 mg/L

Cadmium, total recoverable



## Limit Start Date = 1/1/0/

### Season = 0

_											
Red. Mon. mg/	DAILY MX	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 mg/L	0 ma/L
	Rec Dt	1 4/15/11	1 7/11/11	11 10/14/11	11/13/11	12 4/6/12	12 4/10/13	12 4/10/13	12 1/15/13	13 4/11/13	06/30/2013 7/15/13
	MP Dt	03/31/20	06/30/20	09/30/20	12/31/20	03/31/20	06/30/20	09/30/20	12/31/20	03/31/20	06/30/201
	Pram	01113	01113	01113	01113	01113	01113	01113	01113	01113	01113
	Req. Mon. mg/L	MP Dt Rec Dt	MP Dt Rec Dt 03/31/2011 4/15/11	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11 12/31/2011 1/13/11	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11 12/31/2011 1/13/11 03/31/2012 4/6/12	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11 12/31/2011 1/13/11 03/31/2012 4/6/12 06/30/2012 4/10/13	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 1/14/11 12/31/2012 4/6/12 06/30/2012 4/10/13 09/30/2012 4/10/13	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11 12/31/2012 4/6/12 06/30/2012 4/10/13 09/30/2012 4/10/13	MP Dt Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 09/30/2011 10/14/11 12/31/2011 1/13/11 03/31/2012 4/10/13 09/30/2012 4/10/13 12/31/2012 1/15/13

## Chromium, total recoverable Limit Start Date = 7/1/07

ខ	Req. Mon. mg/L MP Dt Rec Dt DAILY MX	2011 4/15/11		_		03/31/2012 4/6/12 0.01 mg/L	06/30/2012 4/10/13 0.01 mg/L	
	Pram	8	01118	01118	01118	01118	01118	

 Pram
 MP Dt
 Rec Dt
 DAILY MX

 01118
 12/31/2012 1/15/13
 0.01 mg/L

 01118
 03/31/2013 4/11/13
 0.01 mg/L

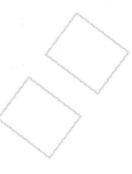
 01118
 06/30/2013 7/15/13
 0 mg/L

## Copper, total recoverable Limit Start Date = 7/1/07

Season = 0

Req. Mon. mg/L DAILY MX 0.01 mg/L 0.06 mg/L 0.01 mg/L 0.02 mg/L 0.01 mg/L 0.01 mg/L 0.01 mg/L 0 mg/L 0 mg/L 09/30/2011 10/14/11 06/30/2012 4/10/13 09/30/2012 4/10/13 12/31/2012 1/15/13 03/31/2013 4/11/13 06/30/2013 7/15/13 Rec Dt 03/31/2011 4/15/11 06/30/2011 7/11/11 12/31/2011 1/13/11 03/31/2012 4/6/12 01119 01119 01119 01119 01119 01119 01119 01119 01119 01119 Pram

### Hardness, total [as CaCO3] Limit Start Date = 7/1/07



ຮ	Req. Mon. mg/L	DAILY MX	40 mg/L	47 mg/L	42 mg/L	46 mg/L	43 mg/L	41 mg/L	41 mg/L	30 mg/L	39 mg/L	48 mg/L
		MP Dt Rec Dt	03/31/2011 4/15/11	06/30/2011 7/11/11	09/30/2011 10/14/11	12/31/2011 1/13/11	03/31/2012 4/6/12	06/30/2012 4/10/13	09/30/2012 4/10/13	12/31/2012 1/15/13	03/31/2013 4/11/13	06/30/2013 7/15/13
		Pram	00600	00600	00600	00600	00600	00600	00600	00600	00600	00600

## LC50 Static 48Hr Acute Ceriodaphnia Limit Start Date = 7/1/07

	Z										
C1 100 %	DAILY MN	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
					_						8
	Rec Dt	03/31/2011 4/15/11	06/30/2011 7/11/11	09/30/2011 10/14/11	12/31/2011 1/13/11	03/31/2012 4/6/12	06/30/2012 4/10/13	09/30/2012 4/10/13	12/31/2012 1/15/13	03/31/2013 4/11/13	06/30/2013 7/15/13
	<b>+</b> 1	/2011	/2011	/2011	/2011	/2012	/2012	/2012	/2012	/2013	/2013
	MP Dt	03/31	06/30	08/60	12/31	03/31	06/30	09/30	12/31	03/31	06/30
	a	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B	TAA3B
	Pram	3	Σ¥	₹	¥	¥	₹	₹	¥	¥	¥
	щ	•	•								

### LC50 Static 48Hr Acute Pimephales Limit Start Date = 7/1/07

### Season = 0

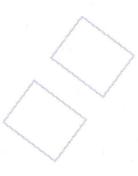
			ر د
			100 %
Pram	MP Dt	Rec Dt	DAILY MN
TAA6C	03/31/2011 4/15/11	14/15/11	100 %
TAA6C	06/30/2011 7/11/11	1 7/11/11	100 %
TAA6C	09/30/2011 10/14/11	1 10/14/11	100 %
TAA6C	12/31/2011 1/13/11	1 1/13/11	100 %
TAA6C	03/31/2012 4/6/12	2 4/6/12	100 %
TAA6C	06/30/2012 4/10/13	2 4/10/13	100 %
TAA6C	09/30/2012 4/10/13	2 4/10/13	100 %
TAA6C	12/31/2012 1/15/13	2 1/15/13	100 %
TAA6C	03/31/2013 4/11/13	3 4/11/13	100 %
TAAGC	TAA6C 06/30/2013 7/15/13	3 7/15/13	100 %

### Lead, total recoverable Limit Start Date = 7/1/07

### Season = 0

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			Red. Mon. mg/L
Pram	MP Dt	Rec Dt	DAILY MX
01114	03/31/2011	4/15/11	0 mg/L
01114	06/30/2011	7/11/1	0 mg/L
01114	09/30/2011	10/14/11	0.01 mg/L
01114	12/31/2011 1/13/11	1/13/11	0 mg/L
01114	03/31/2012 4/6/12	4/6/12	0 mg/L



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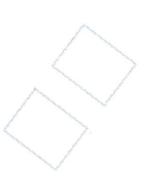
Req. Mon. mg/L DAILY MX 0 mg/L 0 mg/L 0 mg/L 0 mg/L 0 mg/L 03/31/2013 4/11/13 06/30/2013 7/15/13 Rec Dt 06/30/2012 4/10/13 09/30/2012 4/10/13 12/31/2012 1/15/13 01114 01114 01114 01114 01114

### Nickel, total recoverable Limit Start Date = 7/1/07

### Season = 0

Req. Mon. mg/L DAILY MX 0.05 mg/L 0.07 mg/L 0.08 mg/L 0.04 mg/L 0.06 mg/L 0.07 mg/L 0.08 mg/L 0.06 mg/L 0.03 mg/L 09/30/2011 10/14/11 03/31/2011 4/15/11 06/30/2011 7/11/11 12/31/2011 1/13/11 06/30/2012 4/10/13 09/30/2012 4/10/13 12/31/2012 1/15/13 03/31/2013 4/11/13 06/30/2013 7/15/13 03/31/2012 4/6/12 01074 01074 01074 01074 01074 01074 01074 01074 01074 01074

### Nitrogen, ammonia total [as N] Limit Start Date = 7/1/07



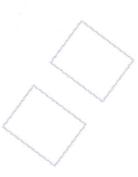
### Season = 0

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		Red. Mon. mg/L
Pram	MP Dt Rec Dt	DAILY MX
00610	03/31/2011 4/15/11	23 mg/L
00610	06/30/2011 7/11/11	19 mg/L
00610	09/30/2011 10/14/11	20 mg/L
00610	12/31/2011 1/13/11	4.4 mg/L
00610	03/31/2012 4/6/12	19 mg/L
00610	06/30/2012 4/10/13	20 mg/L
00610	09/30/2012 4/10/13	3.3 mg/L
00610	12/31/2012 1/15/13	14 mg/L
00610	03/31/2013 4/11/13	18 mg/L
00610	06/30/2013 7/15/13	11 mg/L

# Noel Statre 7Day Chronic Ceriodaphnia Limit Start Date = 7/1/07

5	13.3 %	DAILY MN	51 %	% 8.9	% 8.9	100 %	51 %	51 %	% 8.9	26 %	% 92	21 %
		MP Dt Rec Dt	03/31/2011 4/15/11	06/30/2011 7/11/11	09/30/2011 10/14/11	12/31/2011 1/13/11	03/31/2012 4/6/12	06/30/2012 4/10/13	09/30/2012 4/10/13	12/31/2012 1/15/13	03/31/2013 4/11/13	06/30/2013 7/15/13
		Pram	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B	TBP3B



## Noel Statre 7Day Chronic Pimephales Limit Start Date = 7/1/07

### Season = 0

ပ	13.3 %	DAILY MN	51 %	51 %	51 %	100 %	100 %	26 %	100 %	100 %	51 %	51%
		MP Dt Rec Dt	03/31/2011 4/15/11	06/30/2011 7/11/11	09/30/2011 10/14/11	12/31/2011 1/13/11	03/31/2012 4/6/12	06/30/2012 4/10/13	09/30/2012 4/10/13	12/31/2012 1/15/13	03/31/2013 4/11/13	06/30/2013 7/15/13
		Pram	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C	TBP6C

### Zinc, total recoverable Limit Start Date = 7/1/07

3	Red. Mon. mg/L			0.02 mg/L		
		Rec Dt	2011 4/15/11	06/30/2011 7/11/11	2011 10/14/1	12/31/2011 1/13/11
		am MP Dt		01094 06/30/		
		Pr	5	5	5	5

C3
Req. Mon. mg/L
DAILY MX
0.03 mg/L
0.02 mg/L
0.03 mg/L
0.01 mg/L
0.02 mg/L

MP Dt Rec Dt 03/31/2012 4/6/12

Pram 01094

01094

06/30/2012 4/10/13

09/30/2012 4/10/13

01094

12/31/2012 1/15/13

03/31/2013 4/11/13 06/30/2013 7/15/13

01094

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the April to June 2013 period.

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manholes, continuing with the infiltration and inflow testing and evaluation of the
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The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project status when more substantial information is known.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Larry A. Wiggins, P.E. Public Works Director Town of Newport, NH

LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

T. Seigle, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

A. Fulton, Esq. (Gardner, Fulton & Waugh, P.L.L.C. - 78 Bank Street, Lebanon, NH 03766-1727)

C:\Users\PublicWorks\Documents\WORD\STP\PhosphorusRemoval\USEPA-Studlien.QuarterlyRpt.2013-Apr-Jun.doc

FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7012 2210 0002 0519 2626 NHDES - CERTIFIED MAIL: 7012 2210 0002 0519 2633 TOWN OF NEWPORT, N.H.

### **FAX TRANSMISSION**

DATE:

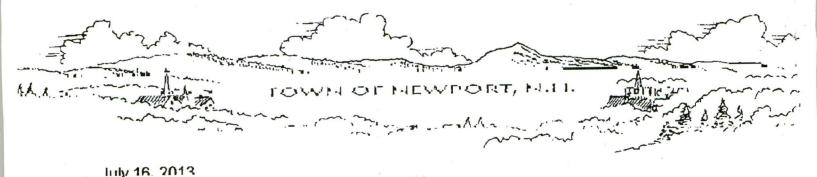
ATTN: Susan Studlien, Director

FAX NO.:

Harry A. Wiggins, Director FROM:

003-003-0015

FAX TRANSMISSION REGARDING:



Ms. Stisan Studien. Director.
Office of Environmental Stewardship.
U.S. Environmental Protection Agency
E.D. Lore, D. J. 1999.
Boston, MA 02109

Re:

NPDES Permit No. NH0100200

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Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

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Town of Newport, NH

### LAW/jas

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FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7012 2210 0002 0519 2626 NHDES - CERTIFIED MAIL: 7012 2210 0002 0519 2633 Sent via Geroneo wan and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re:

NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

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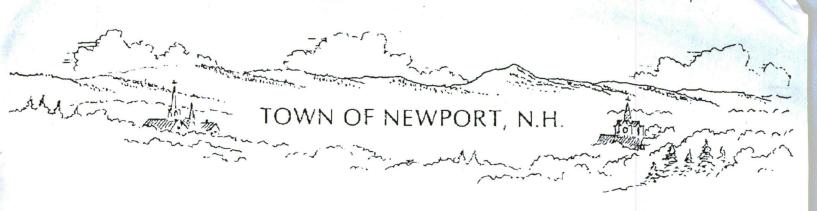
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### **FAX TRANSMISSION**

	A	00	A	
DATE:	April	24	0)015	)

FAX TO: USEPA - Region

ATTN: Susan Studlien Director

FAX NO .: (017-918-0700

FROM: Larry A. Wiggins, Director

NEWPORT HAVIC WORKS DEPARTMENT

FAX NO.: 603-863-8015

### FAX TRANSMISSION REGARDING:

NPDES Permit No. NH0100200 Udministrative Order Docket# 09-015 Newport WMTP Upgrade Quarterly Report

PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 603 863-3650 IF YOU DO NOT RECEIVE ALL PAGES OR HAVE ANY QUESTIONS REGARDING THIS DOCUMENT.

TOTAL PAGES INCLUDING THIS COVER PAGE 3

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April 29, 2013

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1
5 Post Office Sq., Suite 100
Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the January to March 2013 period.

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Ms. Susan Studlien, Director
USEPA Office of Environmental Stewardship
WWTP Phosphorus Removal Upgrade (AO 09-015)

April 29, 2013 Quarterly Report Page 2 of 2

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Respectfully,

Larry A. Wiggins, P.E. Public Works Director Town of Newport, N.I.

### LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

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T. Seigle, (NHDES, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095)

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FAX EPA - 617-918-0700 EPA - CERTIFIED Mail: 7012-2210-0002-0519-2565 NHDES - CERTIFIED MAIL: 7012-2210-0002-0519-2572 April 29, 2013

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

**Quarterly Report** 

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### LAW/jas

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P. Brown, Town Manager

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C:\Users\PublicWorks\Documents\WORD\STP\PhosphorusRemoval\USEPA-Studlien.QuarterlyRpt.2013-Jan-March.doc

FAX EPA - 617-918-0700

EPA - CERTIFIED Mail: 7012-2210-0002-0519-2565 NHDES - CERTIFIED MAIL: 7012-2210-0002-0519-2572 February 27, 2013

Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re:

NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Construction Status Update

Dear Ms. Studlien:

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Based on the events that have occurred since the Town's January 11 letter, the Town is notifying the EPA that AECOM, the Town's engineering consultant, has determined that Substantial Completion has not been achieved. (Please see attached copy of a letter from Marc W. Morin, P.E. of AECOM, to Bill Ouellette of Penta Corporation dated February 20, 2013.) Please also note from this letter that the plant is experiencing significant operational issues, the causes of which are currently unknown.

On February 21, 2013, Town Manager Paul Brown and I met with representatives of the New Hampshire Department of Environmental Services (NHDES) to discuss AECOM's letter and the project's status.

At this time the Town cannot provide a date for resolution of these issues since AECOM is unable to provide a prospective compliance date. The Town will keep NHDES and EPA apprised of the situation and any significant events relative to project completion when more substantial information is known. The Town requests the EPA's indulgence until that information is available.

Please contact me at the address below if you need further information regarding the status of the project.

Sincerely,

Carry A. Wiggins, P.E.

Public Works Director

Town of Newport, NH 15 Sunapee Street

Newport, NH 03773

### LAW/jas

CC:

Paul Brown, Town Manager, Newport, NH (w/ attch)

Joy Hilton, U.S. EPA Region 1 (5 Post Office Sq., Suite 100 (SEW), Boston, MA 02109) (w/ attch)
Tracy Wood, P.E., NHDES (WEB-Compliance, PO Box 95, Concord, NH 03302-0095) (w/ attch)
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FAXED: 617-918-0700

Certified Mail: 7012 0470 0000 8259 4984

A=COM

AECOM 1000 Elm Street Suite 802 Manchester, NH 03101 www.aecom.com 603 622 5150 tel 603 622 8480 fax

February 20, 2013

Mr. Bill Ouellette Penta Corporation 1253 Whittier Highway P.O. Box 390 Moultonboro, NH 03254

Subject:

Phosphorus Removal Upgrade

**Operational Issues** 

Dear Mr. Ouellette:

In response to the ongoing issues associated with the operation of the new Phosphorus Removal System at the Newport Wastewater Treatment Plant, AECOM has reviewed pertinent documentation and visited the site to observe operations. To date, AECOM has reviewed the correspondence from Westech regarding the Disc Filters and conducted internal team meetings for the purpose of evaluating the information and formulating a response. Finally, on February 7, 2013, AECOM Operations staff visited the site to make visual observations and collect data. The following is a summary of our observations and a recommended plan of action.

- The disc filters are not operating in accordance with the specifications. The current plant influent
  composition to the filters (TSS, flow, hydraulic loading) is well below the specified values that the
  filters should be able to process. The 0.9 mg/l phosphorus influent noted in the specifications is
  a typographical error but the dosages of the coagulant and polymer are correct when based on
  the flow capacity of the filters at an approximate 3 mg/l total Phosphorus input.
- The performance results documented during the 5-day performance test have not been duplicated since the conclusion of the test.
- Current average daily flows or approximately 600,000 gpd are significantly lower than design flows and the stated capacity of the disc filters
- Backwashing of the filters has been continuous with no discernible improvement in headloss across the filters.
- Coagulant and polymer dosages are significantly higher than during the pilot test. This is significant considering the total phosphorus levels are lower than during the piloting.
- The effluent in the flocculation basin was visually noted to be extremely turbid.
- Due to the high headloss condition across the filters, a portion of the flow has been continually bypassing the filters, resulting in an overall degradation of final effluent quality.

At this time, it is AECOM's belief that the operational issues with the Phosphorus Removal System are likely a result of multiple causes, each of which partially contributing to the observed operational issues. In light of this, AECOM has developed the following initial recommendations for determining the causes of the operational problems and improving the operation of the Phosphorus Removal System.

- It is AECOM's opinion that the phosphorus removal system has not been thoroughly optimized
  with respect to the upstream chemistry and in accordance with the contract documents. It is
  therefore recommended that the manufacturer return to the site to perform additional testing and
  optimization of the process at full scale flows.
- Additional data is required to fully evaluate the system and what may be at issue. At a minimum, both Total and Reactive phosphorus as well as total suspended solids (TSS) testing should be performed at the following locations
  - 1. Lagoon Effluent Wetwell
  - 2. Filter Influent
  - 3. Filter Effluent (prior to mixing with bypass flows)
  - 4. Final Effluent (after mixing with bypass flows)

Testing for Al should be conducted at locations 2, 3, and 4 to confirm that the coagulant dosing system is performing as intended.

- Evaluate alternative coagulants and dosages, specifically, Poly Aluminum Chloride (PACI).
   PACI is currently used for solids dewatering and the plant staff is familiar with its use.
- · Evaluate the use of alternative polymers
- Remove filter discs to evaluate condition of media (inside surface) and whether backwashing is
  effectively cleaning the media.
- Evaluate the polymer carrier water flow rate and adjust in accordance with the polymer manufacturer's recommendations. Perform testing as required to determine adequate polymer dilution prior to addition to mix tank.
- Coordinate additional testing with AECOM so that a representative from AECOM's operations staff can be on site during the testing in order to observe the procedures and offer assistance where applicable.

Due to the operational issues listed herein and the need for further optimization of the system, it is AECOM's opinion that the phosphorus removal system is not performing as intended and therefore the Owner does not have beneficial use of the system. Therefore, substantial completion, as defined in the contract documents cannot be certified and the Town has the right to assess liquidated damages but no decision has been made about it. Please make the necessary arrangements to address the recommendations and coordinate scheduling with AECOM and the Town of Newport.

### **A**=COM

Should you need further information or have any questions, feel free to contact me directly at 622-2978.

Very truly yours

Marc W. Morin, P.E. Project Manager

L. Wiggins, Town of Newport T. Seigle, NHDES Cc:

### TOWN OF NEWPORT, N.H.

### **FAX TRANSMISSION**

DATE: Feb. 27, 2013

FAX TO: USEPA - Region 1

ATTN: Susan Studlier

FAX NO.: (017-418-0700

FROM: Larry Wiggins

NEWPORT Public Works DEPARTMENT

FAX NO.: 603-863-8015

FAX TRANSMISSION RECARDING:

APDES Parmit No. NHO100200 ADDOCKET NO. 09-015

Newport WMTP Upgrade Constr. Status Update

PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT 603-863-3650 IF YOU DO NOT RECEIVE ALL PAGES OR HAVE ANY QUESTIONS REGARDING THIS DOCUMENT.

TOTAL PAGES INCLUDING THIS COVER PAGE 6

C: OFFICE WPWIN WPDOCS FORMS FAXTRANS, FRM

February 27, 2013

Sent via Certified Mail and Fax

Ms. Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency
Region 1
5 Post Office Sq., Suite 100
Boston, MA 02109

Re: NPDES Permit No. NH0100200
Administrative Order Docket No. 09-015
Town of Newport Wastewater Treatment Plant Upgrade
Construction Status Update

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Ms. Susan Studlien, Director
USEPA Office of Environmental Stewardship
WWTP Phosphorus Removal Upgrade (AO 09-015)

February 27, 2013 Project Status Update Page 2 of 2

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Town of Newport, NH

15 Sunapee Street

Newport, NH 03773

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FAXED: 617-918-0700

Certified Mail: 7012 0470 0000 8259 4984

Subject: Phosphorus Removal Upgrade Operational Issues

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Sent via Certified Mail and Fax

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Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

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FAXED: 617-918-0700

Certified Mail: 7012 0470 0000 8259 4984

AECOM 1000 Elm Street Suite 802 Manchester, NH 03101 www.aecom.com 603 622 5150 te 603 622 8480 fa

February 20, 2013

Mr. Bill Ouellette Penta Corporation 1253 Whittier Highway P.O. Box 390 Moultonboro, NH 03254

Subject:

Phosphorus Removal Upgrade Operational Issues

Dear Mr. Quellette:

In response to the ongoing issues associated with the operation of the new Phosphorus Removal System at the Newport Wastewater Treatment Plant, AECOM has reviewed pertinent documentation and visited the site to observe operations. To date, AECOM has reviewed the correspondence from Westech regarding the Disc Filters and conducted internal team meetings for the purpose of evaluating the information and formulating a response. Finally, on February 7, 2013, AECOM Operations staff visited the site to make visual observations and collect data. The following is a summary of our observations and a recommended plan of action.

- The disc filters are not operating in accordance with the specifications. The current plant influent composition to the filters (TSS, flow, hydraulic loading) is well below the specified values that the filters should be able to process. The 0.9 mg/l phosphorus influent noted in the specifications is a typographical error but the dosages of the coagulant and polymer are correct when based on the flow capacity of the filters at an approximate 3 mg/l total Phosphorus input.
- The performance results documented during the 5-day performance test have not been duplicated since the conclusion of the test.
- Current average daily flows or approximately 600,000 gpd are significantly lower than design flows and the stated capacity of the disc filters
- Backwashing of the filters has been continuous with no discernible improvement in headloss across the filters.
- Coagulant and polymer dosages are significantly higher than during the pilot test. This is significant considering the total phosphorus levels are lower than during the piloting.
- The effluent in the flocculation basin was visually noted to be extremely turbid.
- Due to the high headloss condition across the filters, a portion of the flow has been continually bypassing the filters, resulting in an overall degradation of final effluent quality.

At this time, it is AECOM's belief that the operational issues with the Phosphorus Removal System are likely a result of multiple causes, each of which partially contributing to the observed operational issues. In light of this, AECOM has developed the following initial recommendations for determining the causes of the operational problems and improving the operation of the Phosphorus Removal System.

- It is AECOM's opinion that the phosphorus removal system has not been thoroughly optimized
  with respect to the upstream chemistry and in accordance with the contract documents. It is
  therefore recommended that the manufacturer return to the site to perform additional testing and
  optimization of the process at full scale flows.
- Additional data is required to fully evaluate the system and what may be at issue. At a minimum, both Total and Reactive phosphorus as well as total suspended solids (TSS) testing should be performed at the following locations
  - 1. Lagoon Effluent Wetwell
  - 2. Filter Influent
  - 3. Filter Effluent (prior to mixing with bypass flows)
  - Final Effluent (after mixing with bypass flows)

Testing for Al should be conducted at locations 2, 3, and 4 to confirm that the coagulant dosing system is performing as intended.

- Evaluate alternative coagulants and dosages, specifically, Poly Aluminum Chloride (PACI).
   PACI is currently used for solids dewatering and the plant staff is familiar with its use.
- Evaluate the use of alternative polymers
- Remove filter discs to evaluate condition of media (inside surface) and whether backwashing is
  effectively cleaning the media.
- Evaluate the polymer carrier water flow rate and adjust in accordance with the polymer manufacturer's recommendations. Perform testing as required to determine adequate polymer dilution prior to addition to mix tank.
- Coordinate additional testing with AECOM so that a representative from AECOM's operations staff can be on site during the testing in order to observe the procedures and offer assistance where applicable.

Due to the operational issues listed herein and the need for further optimization of the system, it is AECOM's opinion that the phosphorus removal system is not performing as intended and therefore the Owner does not have beneficial use of the system. Therefore, substantial completion, as defined in the contract documents cannot be certified and the Town has the right to assess liquidated damages but no decision has been made about it. Please make the necessary arrangements to address the recommendations and coordinate scheduling with AECOM and the Town of Newport.

Should you need further information or have any questions, feel free to contact me directly at 622-2978.

Very truly yours

Marc W. Morin, P.E. Project Manager

Cc: L. Wiggins, Town of Newport T. Seigle, NHDES

January 29, 2013

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

Re: NPDES Permit No. NH0100200

Administrative Order Docket No. 09-015

Town of Newport Wastewater Treatment Plant Upgrade

Quarterly Report

Dear Ms. Studlien:

As required by the EPA's Administrative Order (AO), please find the following quarterly report on the status of the Town's Wastewater Treatment Facility Upgrade for the October to December 2012 period.

- 1. The Town of Newport's Wastewater Treatment Plant Phosphorous Removal Upgrade Project is under construction. The status is as follows:
  - a) Due to the significant delay in delivery of the pre-engineered building, the project was delayed and Penta Corporation could not meet the October 31, 2012 Substantial Completion deadline. Penta Corporation requested a change order to revise the date of Final Completion to December 31, 2012. On October 9, 2012, the Town received the EPA's letter as prepared by Susan Studlien, Director, Office of Environmental Stewardship granting the Town's request for Final Completion to be December 31, 2012.
  - b) Penta Corporation worked through October, November and December to complete the project however in mid-December, it was discovered the filter equipment, which was built in Sweden, had been manufactured incorrectly. When WesTech, Inc. (Penta's subcontractor) arrived onsite for system start-up, it was discovered the filter backwash pumps and probes were manufactured too short and were not submerged enough to operate accurately.
  - c) In order to continue with testing and start-up, WesTech, Inc. (the disc filter manufacturer) replaced the backwash pumps and probes with temporary equipment. The new permanent backwash pumps and probes have been reordered from Sweden and are scheduled to be installed in 2013.

According to Penta Corporation, the temporary pumps and probes have allowed the filters to operate in automatic mode since the last week in December, 2012.

Polymer testing began on December 26, 2012 and has been ongoing since that time.

- d) By December 31, 2012, the building was weather tight. With the exception of the disc filters, the process equipment was calibrated and start-up operations were The Wastewater Treatment Plant Operators received operational training on most of the process equipment.
- e) The project was not completed by the December 31, 2012 deadline. Polymer testing and optimization continues into January 2013. The 5-day performance test (required for Substantial Completion) is scheduled for January 2013. The Town will need to request an extension of the completion date when Penta Corporation submits a revised schedule.
- 2. With regards to Whole Effluent Toxicity issue:
  - a) The Wastewater Treatment Plant Operators pumped sludge from Lagoon No. 1 to the sludge disposal geotube area. The operators estimate approximately 100,000 gallons of sludge were removed from the lagoon.
  - b) Due to the delay in the completion of the plant, the Town will need to request an extension from the current November 30, 2013 deadline for achieving compliance with the NPDES Permit regarding the WET monitoring.
- 3. The infiltration and inflow study is ongoing. The Public Works Department will continue the sewer system evaluation by constructing additional sewer manholes, continuing with the infiltration and inflow testing and evaluation of the sewer system with sewer video.

If you need further information or have any questions, please call me at (603) 863-3650.

Respectfully,

Larry A. Wiggins, P.E. Public Works Director Town of Newport, NH

LAW/jas

CC:

Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

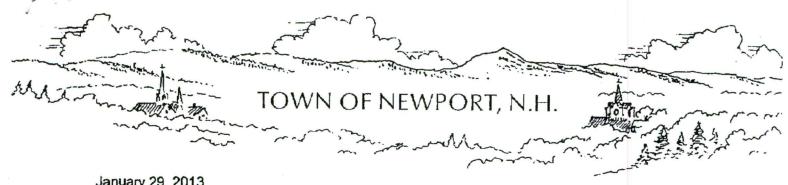
A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

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FAX EPA - 617-918-0700

EPA - CERTIFIED MAIL: 7010 3090 0003 5429 9747 NHDES - CERTIFIED MAIL: 7012 0470 0000 8259 4939



January 29, 2013

### Sent via Certified Mail and Fax

Ms. Susan Studlien, Director Office of Environmental Stewardship U.S. Environmental Protection Agency Region 1 5 Post Office Sq., Suite 100 Boston, MA 02109

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January 29, 2013 Quarterly Report Page 2 of 2

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Larry A. Wiggins, P.E. Public Works Director Town of Newport, NH

### LAW/jas

cc: Tracy Wood, P.E., NHDES (Water Engineering Bureau-Compliance, PO Box 95, Concord, NH 03302-0095)

P. Brown, Town Manager

A. Greenleaf, Wastewater Treatment Plant Superintendent

R. Naylor, Water & Sewer Superintendent

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